

## Environmental Protection Agency

## § 63.2995

### § 63.2994 How do I verify the performance of monitoring equipment?

(a) Before conducting the performance test, you must take the steps listed in paragraphs (a)(1) and (2) of this section:

(1) Install and calibrate all process equipment, control devices, and monitoring equipment.

(2) Conduct a performance evaluation of the continuous monitoring system (CMS) according to § 63.8(e) which specifies the general requirements and requirements for notifications, the site-specific performance evaluation plan, conduct of the performance evaluation, and reporting of performance evaluation results.

(b) If you use a thermal oxidizer, the temperature monitoring device must meet the performance and equipment specifications listed in paragraphs (b)(1) through (3) of this section:

(1) The temperature monitoring device must be installed either at the exit of the combustion zone of each thermal oxidizer, or at the location specified by the manufacturer. The temperature monitoring device must also be installed in a location before any heat recovery or heat exchange equipment, and it must remain in the same location for both the performance test and the continuous monitoring of temperature.

(2) The recorder response range must include zero and 1.5 times the average temperature required in § 63.2984(a)(1).

(3) The measurement method or reference method for calibration must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or an alternate reference subject to the approval of the Administrator.

### § 63.2995 What equations must I use to determine compliance?

(a) *Percent reduction for formaldehyde.* To determine compliance with the percent reduction formaldehyde emission standard, use equation 1 of this section as follows:

$$E_f = \frac{M_i - M_o}{M_i} \times 100 \quad (\text{Eq. 1})$$

Where:

$E_f$  = Formaldehyde control efficiency, percent.

$M_i$  = Mass flow rate of formaldehyde entering the control device, kilograms (pounds) per hour.

$M_o$  = Mass flow rate of formaldehyde exiting the control device, kilograms (pounds) per hour.

(b) *Formaldehyde mass emissions rate.* To determine compliance with the kilogram per megagram (pound per ton) formaldehyde emission standard, use equation 2 of this section as follows:

$$E = \frac{M}{P} \quad (\text{Eq. 2})$$

Where:

$E$  = Formaldehyde mass emissions rate, kilograms (pounds) of formaldehyde per megagram (ton) of fiberglass mat produced.

$M$  = Formaldehyde mass emissions rate, kilograms (pounds) per hour.

$P$  = The wet-formed fiberglass mat production rate during the emissions sampling period, including any material trimmed from the final product, megagrams (tons) per hour.

(c) *Urea-formaldehyde (UF) resin solids application rate.* To determine the UF resin solids application rate, use equation 3 of this section as follows:

$$\frac{\text{UF Solids}}{\text{Hour}} = \text{LOI} \times \text{UFL} \times \text{MW} \times \text{SQ} \quad (\text{Eq. 3})$$

Where:

UF solids/hour = UF resin solids application rate (pounds per hour).

LOI = loss on ignition (weight fraction), or pound of organic binder per pound of mat.

UFL = UF-to-latex ratio in the binder (mass fraction of UF resin solids in total com-

bined resin solids for UF and latex), or pound of UF solids per pound of total resin solids (UF and latex).

MW = weight of the final mat per square (pounds per roofing square).

SQ = roofing squares produced per hour.

MONITORING REQUIREMENTS

**§ 63.2996 What must I monitor?**

You must monitor the parameters listed in table 1 of this subpart and any other parameters specified in your OMM plan. The parameters must be monitored, at a minimum, at the corresponding frequencies listed in table 1 of this subpart.

**§ 63.2997 What are the requirements for monitoring devices?**

(a) If formaldehyde emissions are controlled using a thermal oxidizer, you must meet the requirements in paragraphs (a)(1) and (2) of this section:

(1) Install, calibrate, maintain, and operate a device to monitor and record continuously the thermal oxidizer temperature at the exit of the combustion zone before any substantial heat exchange occurs or at the location consistent with the manufacturer's recommendations.

(2) Continuously monitor the thermal oxidizer temperature and determine and record the average temperature in 15-minute and 3-hour block averages. You may determine the average temperature more frequently than every 15 minutes and every 3 hours, but not less frequently.

(b) If formaldehyde emissions are controlled by process modifications or a control device other than a thermal oxidizer, you must install, calibrate, maintain, and operate devices to monitor the parameters established in your OMM plan at the frequency established in the plan.

NOTIFICATIONS, REPORTS, AND RECORDS

**§ 63.2998 What records must I maintain?**

You must maintain records according to the procedures of § 63.10. You must maintain the records listed in paragraphs (a) through (g) of this section.

(a) All records required by § 63.10. Table 2 of this subpart presents the applicable requirements of the general provisions.

(b) The OMM plan.

(c) Records of values of monitored parameters listed in table 1 of this subpart to show continuous compliance

with each operating limit specified in table 1 of this subpart.

(d) Records of maintenance and inspections performed on the control devices.

(e) If an operating parameter deviation occurs, you must record:

(1) The date, time, and duration of the operating parameter deviation;

(2) A brief description of the cause of the operating parameter deviation;

(3) The dates and times at which corrective actions were initiated and completed;

(4) A brief description of the corrective actions taken to return the parameter to the limit or to within the range specified in the OMM plan; and

(5) A record of whether the deviation occurred during a period of startup, shutdown, or malfunction.

(f) Keep all records specified in § 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(g) If you operate your process or control device under alternative operating condition and have established operating limits for each condition as specified in § 63.2989(c), then you must keep records of the date and time you changed operations from one condition to another, the condition under which you are operating, and the applicable operating limits for that condition.

**§ 63.2999 In what form and for how long must I maintain records?**

(a) You must maintain each record required by this subpart for 5 years. You must maintain the most recent 2 years of records at the facility. The remaining 3 years of records may be retained offsite.

(b) Your records must be readily available and in a form so they can be easily inspected and reviewed. You can keep the records on paper or an alternative media, such as microfilm, computer, computer disks, magnetic tape, or on microfiche.

**§ 63.3000 What notifications and reports must I submit?**

(a) You must submit all notifications and reports required by the applicable general provisions and this section. Table 2 of this subpart presents the applicable requirements of the general provisions.